

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

The Examiner's attention is initially directed to the concurrently filed formal claim for priority under 35 U.S.C. §119 and the certified priority document attached thereto. Updating of appropriate USPTO records is requested so as to reflect and result in a written future acknowledgement that certified copies of all of applicant's priority documents have been received in this file so as to perfect applicant's claim for priority rights.

As requested by the Examiner, the above amendment effects substantial amendments to the Abstract so as to bring into appropriate US form.

The rejection of claims 1 and 2 under 35 U.S.C. §102(e) by Sears et al '248 is respectfully traversed.

The context for the claimed invention is a packet-switched (otherwise known as 'packet-based') network as recited in the preamble of claim 1. By contrast, Sears is concerned with a circuit-switched (otherwise known as 'circuit-based') network. One fundamental distinction is that packet-based networks rely on the addressing of packets to determine a destination while circuit-based networks rely on the disposition of a hard-wired circuit to determine a destination.

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Sears is careful to distinguish between the two. In particular, Sears (1:21-34) specifically comments on “packet-based” networks and the development of management methods for such networks, and continues at line 35 to point out their inapplicability to circuit-based networks. Sears comments that packet-based protocols are inapplicable (“too fast to be served by” – lines 43/44) packet-based protocols. Further, Sears make clear beyond any doubt that his methods concern a determination of the connectivity of a circuit-based network (see, e.g., Sears at 1:55). Moreover, Sears makes no reference at all in his method to any employment of addressing: his TRACE message is a distinctive signal such as a “a unique frequency, a variation in voltage or some other pre-arranged mechanism” (3:22-24). It is merely distinct from a regular transmission (4:51).

The Examiner asserts first that Sears discloses a method for identifying an edge switch and relies on the abstract “for reference to a method for tracking connectivity”. However, the two referenced methodologies are not equivalent. The former answers the question; “what is the identity of the switch which is immediately adjacent a given terminal user?”. The second is whether a connection exists to a node whatever that node may be.

The Examiner next asserts that Sears discloses an edge switch. However no edge switch is disclosed or defined in Sears’ abstract.

The Examiner next asserts that Sears discloses sending a “unicast request packet” to a specified user. However, the Sears’ TRACE message is not a unicast request message. It is not even uniquely addressed to a user. More particularly it does not contain (nor is it intended to contain) the IP address of a specified user.

The Examiner next asserts that Sears discloses that the unicast request (TRACE) message includes destination address data. However, while Sears discloses (3:25-26) that the TRACE message may contain “an identifying address”, Sears nowhere suggests that this is a destination address.

The Examiner next asserts that Sears discloses that the “request packet” (presumably the TRACE message) contains in addition to the (absent) destination address an identifying address AND a selected identification code. However, Sears does not disclose any such thing. Sears merely discloses a distinctive message.

The Examiner next asserts that Sears discloses both diverting the packet to a management entity and returning it to the server. However, the Examiner has used Sears’ management component 62 to represent both applicant’s server AND applicant’s switch management entity. This is impossible. Component 62 cannot be both the central management entity (applicant’s server) and the switch’s management entity that has to organize the return of a packet back to the server.

The Examiner next asserts that Sears discloses the return to the server of an identification of the switch and the user. However, this also is not so. Sears returns only a port list. Such a list cannot contain an identification of both the edge switch and the user to which is it connected. Applicant's response packet identifies edge switch 12 and an end user (e.g., PC2 in the case of the edge port 5 on switch unit 6). Sears does not even seek, let alone obtain, such information.

In short, it is respectfully submitted that the Examiner's rejection of claim 1 violates both the language of the claim and the facts of Sears.

As for claim 2, this claim requires that the user is caused to reply to the unicast request packet by means of a reply packet including the original identification code in the request packet. The Examiner merely refers to TRACE messages which include a TRACE signature to distinguish the TRACE messages from other messages. The Examiner has failed to identify where Sears specifies a user and it follows that there is no such specified user that returns a reply packet. The Examiner has throughout confused a port on a switch with a user identified in the original message.

New claims 3 and 4 are also allowable for reasons advanced above in relation to claim 1. Sears does not parse any reply packet at an edge switch or divert such packet to a management agent for said edge switch. Furthermore, Sears fails to disclose, among other things, obtaining the internet protocol (IP) network address of the specified user;

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and sending a unicast request packet from a policy server to the specified user, the unicast request packet including as a destination address said IP network address and including a selected identification code and a payload.

In summary, Sears is concerned only with discovering the topology of a circuit-switched network – not the identity of the nodes. He may acquire information on those nodes but does not seek to do so and employs a message which is not intended to contain the multiplicity of information items that is necessary for discovering the identity of the particular switch which is an edge switch for a particular specified end user. The point of the applicant's discovery is the need to apply a "policy" (such as filtering certain classes of messages) to the end user, so as for example to prevent the user from sending or receiving certain types of traffic. It is not practical to apply the policy directly to the user, so instead it is applied to the edge switch for that user. That in turn requires the discovery of the identity of the respective edge switch serving that particular user.

Accordingly, this entire application is now believed to be in allowable condition and a formal Notice to that effect is respectfully solicited.

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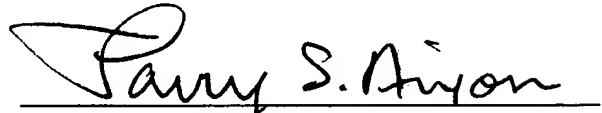
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Respectfully submitted,

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By:

A handwritten signature in black ink, appearing to read "Larry S. Nixon", written over a horizontal line.

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